REGINA

LONG TERM

HOUSING REQUIREMENTS

CITY OF REGINA

URBAN PLANNING DEPARTMENT

REGINA LONG TERM HOUSING REQUIREMENTS

Date of first publication: June 1986

Additional copies available from:

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REGINA LONG TERM HOUSING REQUIREMENTS:

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1. Purpose

The purpose of the report is to provide a long term projection of overall housing requirements, housing needs for the population below the poverty level and housing requirements for senior citizens in Regina. This projection is the Planning Department's revision of the Housing Study prepared by Bairstow and Associates.

2. Methodology

The projection model relates long term requirements for dwelling units (D.U.) to the household growth trends. The requirement for new D.U. (or the over-supply of existing D.U.). reflects the growth (or decline) of age-sex cohorts and their related household headship rates. The model connects various Housing Factors with Household Projections to establish the Housing Requirements.

2.1. Housing Factors (Appendix A) include:

a) household characteristics: age - sex cohorts of household heads by income levels and housing tenure (Tables A1-A3).

b) household characteristics: age - sex cohorts of household heads by income levels and housing tenure and type (Tables A4-A6).

2.2. Household Projections (Appendix B) include:

a) population projections, a Cohort Survival model which extrapolates birth, survival and migration trends from the period 1971 - 1981 to the year 2006 (Tables B1-B5) [1]

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[1] In this report, the annual dates refer to June 30, of every year.

b) regression analysis that correlates the past population of each age-sex cohort together with the household head population (Tables B6-B8).

c) connection of the resulting coefficients with the population projections to establish the future household population by age-sex cohorts (Tables B9-B10).

2.3. Housing Requirement projections (Appendix C) include the following totals and the periodic averages:

a) household rate by tenure and by income levels (Tables C1-C3).

b) subsidized dwelling unit required by senior/working-age population (Tables C4-C5).

c) housing requirements by type of housing (Tables C5-C6).

d) subsidized dwelling unit required by senior/working-age population and by family/non-family household (Tables C7-C9).

e) required development of nursing homes (Table C10).

3. Discussion

3.1. Population Projections 1981 - 2006

Assuming a linear extrapolation of the demographic trends between 1971-1981 (Table B1), the population of Regina is expected to total 225,500 by the year 2006 (Figure 1, Table B2). This is an increase of 40% since the last census of June 1981. The median age of the population will rise from 27.7 to 33.7 with an increasing difference between male and female ages due to the higher life expectancy of females (Figure 2, Table B4).

The number of households will increase by 60%, from 58,378 to 94,270 between 1981-2006 (Table C1). Between 1976-1981 the annual population growth was 1.7% whereas the annual household growth was 3.4%. The rapid growth in the number of households as compared to the total population increase is expected to slow down. This is due to the overall aging of the population which results in a decrease in the rate of household formation. From 2001-2006 the number of households will increase annually by 1.6% whereas population will increase annually by 1.1% (Figure 7, Table B5).

As the gap between the rate of household formation and population growth decreases, there will be a moderation in the trend of declining occupancy levels. In the 20 years between 1961 and 1981, the number of persons per household dropped from 3.7 to 2.8, or a decline of 0.9. By the year 2006, the occupancy level will stabilize at 2.4, or a decline of 0.4 (Figure 7, Table B10).

In terms of the population trends by age group (a.g.), between 1981-2006, the 0-14 age-group will increase moderately from 38,700 to 48,500 (Figures 3,4, Tables B2,B3). This represents a small decline from 23.7% to 21.5% of the total population.

The population of the 15-24 a.g. will experience a drop, both absolutely and relatively, between 1986 and 1996. After 1996 this age group will maintain its relative share of growth compared to the general population.

Significant growth, from 46,700 in 1981 to 62,300 in 1991 the 25-44 a.g. will experience. In relative terms, this group will grow from 28.6% of the total population in 1981 to 33.1% by 1991. The population of this group will remain constant between 1991-2006, resulting in a return to the 1981 percentage share of 28.6% of the total population.

A reverse growth trend will be experienced by the 45-64 a.g. They will increase slightly in population but decrease relative to the total population by 1991. Then the group will increase rapidly both in population and in proportion to 2006. This is the most dramatic change: from 31,400 in 1991 (16.7% of the total population) to 49,900 (22.1%) by 2006.

The rapid increase of the 25-44 a.g. between 1981 and 1991 and the resulting growth of the 45-64 a.g. between 1991 and 2006 reflects the maturing of the baby-boom generation.

Senior citizens (65+ a.g.) will experience a steady increase in actual numbers. However, in relative terms, the growth of this group will moderate in proportion to the total population.

3.2. Household Headship

The household headship rate of each age-sex cohort is calculated in relation to the total population of that cohort.

Note that the household head definition in the 1981 Census of Statistics Canada has been revised to "Person 1" which is "either the husband or the wife of any married couple living in a dwelling" or "either partner in a common-law relationship" or "one parent that lives with his/her never married son/daughter of any age" or, if none of the above, "any member of the household".

Prior to the 1981 Census, the Household Head was defined as "the husband rather then the wife, etc.". In addition, this definition did not include common-law statistics. The changed definition affects the past ratio between male and female headship. In the projections, this error has been corrected by implementing a multiple regression which measures the inter-dependance between the male and the female household rates (Appendix C).

The definition prior to 1981 artificially established a higher headship rate for males above 25 a.g. This explains the drop of the male headship rates in 1981 (Figure 5, Table B9). There are, however, real social and economic factors that contribute to the increase of headship rates, especially for the female population. Marriage postponement has an affect on the headship increase of young males and females. Rising divorce rates, male unemployment and entry of females into the labour force contribute to increased female headship rates.

The increase of headship rates of female senior citizens may be attributed to the higher increase of the female life expectancy relative to the males': between 1961 and 1981 life expectancy of Saskatchewan females had increased by 3.4 years to 79.6 years, while the life expectancy for males had increased by only 1.8 years 72.4 years.

The growth of headship rates is expected to stabilize by 1991 for most age-sex cohorts (Figure 6, Table B10). This stabilizing explains the closing of the gap between the household formation rates and the total population growth (Figure 7).

3.3. Housing Requirements

3.3.1. Overall Housing

Following the decreasing rate of growth of the general population and the decline in household formation, the annual housing requirement is expected to drop from 1,633 D.U. in 1981-86 to a low of 1,299 D.U. in 1991-96 (Figure 8, Table C3). An increase in the housing requirement, rising up to 1,426 D.U. in 2001-2006 will be due to the increase in the 45-64 a.g. population and their high rate of household headship (Figures 4 & 6).

Based on the housing rent and ownership ratio in relation to the income levels (Table C2), it is projected that the rent ratio of the total occupied dwellings units will decline from 28.6% in 1981-86, to 27.9% in 1986-91, and will increase after 1996 (Table C3, Figure 8).

The projections for housing requirements by type, single or multi dwelling unit, is based on the 1971 - 1981 residence patterns of each age cohort (Tables A4 - A6). In 1971 single D.U. consisted of 68.6% of the total housing stock in Regina. In 1981 the rate increased to 69.8% (Figures 9 - 10). The net growth between 1971 and 1981 was 16,203 D.U. of which 72.3% were single D.U. (Table C5). It appears that the 45-64 a.g. had the highest demand for single D.U.: between 1971 and 1981 this a.g. had, in fact, a 3% negative demand for multi D.U. while the demand for single D.U. was 103%. In other words, the demand for additional single D.U. by the 45-64 a.g. was larger than the population growth of this age group.

It is projected that the demand for single D.U. will continue to grow as the maturing of the baby boom generation enters the 45-64 a.g.: in 1991 single D.U. will consist of 76.8% of the overall demand (Table C6). The demand for single D.U. will level off by 1996 when it will consist of 89.6% of the overall.

3.3.2. Subsidized Housing

Housing requirements for the overall low income population have been calculated based on Statistics Canada definition of poverty level and other personal income statistics. Statistics Canada derived low income levels based on the "Family Expenditure Survey, 1982" in which it was determined that the persons spending above 58.5% of their gross income on food, shelter and clothing were considered to be "low income". Unfortunately, at the present, there are no statistics which describe the related population in terms of age group.

The definition of housing requirements for the poor has been revised recently by the Province into a new concept involving housing affordability levels: "Core Need". The Saskatchewan Housing Corporation provides a listing of the core need group by age-group. The housing requirements for the senior citizens and the working-age population were defined base on this source (Table C4).[2]

In 1981, the required subsidized housing was 2,284 D.U. for senior citizens and 932 D.U. for working-age (15-64) households. Given: (a) overall household poverty levels of 11.5% in 1981 and, (b) the increasing number of senior citizen households with poverty levels of 46.4%, the total number of low income households will increase by 5,164, an increase of 77% from 6,713 in 1981 (Figure 11, Table C7).

The household groups which require subsidized housing can be sorted in three ways according to their composition and tenure (Table C7):

Level 1: working-age and senior citizens who rent homes.

Level 2: working-age who either rent or own homes, and senior citizens who rent homes.

Level 3: working-age and senior citizen households who either rent or own homes.

With a required total of 4,023 D.U. of subsidized housing, it appears that Level 2 reflects best the actual number of applicants who qualify for subsidized housing, and the extent of subsidy programs. Level 1 lists only 232 D.U. as the 1986 deficit while, in actuality, the waiting list for all subsidized housing totaled 2,242 applicants. Level 3 requires an additional 5,043 D.U. to the 2,902 subsidized D.U. in 1986, to total 12% of the overall number of households.

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[2] An updated version of this report will be completed in spring 1988 following the completion of S.H.C. province-wide survey and the release of the 1986 census data.

Level 2 not only allows the low income households who are renting their homes, but also the working-age group that own homes but who may be in need of subsidized housing for the following reasons:

a) ownership of substandard homes, or,
b) temporary home ownership (single-parent household following divorce, bankruptcy, or unemployment etc).

Level 2 excludes the senior citizens home owners who are formally below the poverty line but who may formerly have had high incomes and are able to continue to reside in their homes (about 200 senior citizens are on the priorized waiting list).

Given the tenure rates of the senior citizens and working-age households (Figure 11, Tables A3, C3), at Level 2 the annual demand for subsidized housing will decline from 130 units in 1981-86, to 100 between 2001-2006 (Figure 12, Table C7). The decline in this demand parallels the decrease in the housing requirements for the general population (Figure 8).

3.3.3. Nursing Homes

The requirement for development of nursing homes is measured in terms of the demand for beds. Since more than 99% of nursing home inhabitants in Regina are senior citizens, the requirements are based on the projections of the senior citizens population, and by a range of level of service.

Three service levels are defined (beds/1,000 senior citizens, see Figure 13, Table C8):

a) 64/1,000 = the provincial target level.
b) 76/1,000 = the current (1986) service level.
c) 93/1,000 = the desired service level, calculated as the level that would have accommodated the 305 people waiting on the priority list in 1986.

The requirements for additional beds between 1981 to 2006 are 781, at the provincial target level, 1,221 at current service level, and 1,831 at the desired service level. In annual terms, the requirement for additional beds is declining, due to the decreasing rate of senior citizens population growth. At the current service level, the annual requirements will decline from 44 beds between 1981-1986, to 33 between 2001-2006 (Figure 13).

4. Conclusions

Assuming the continuation of past demographic trends, the following is expected:

a) Regina's population is aging: the median age will rise from 27.7 years in 1981 to 33.7 in 2006.

b) the annual rate of household formation will decline to 1.6% in 2001-2006, or half the rate that prevailed in 1976 - 1981 (3.2%).

c) the annual housing requirements will gradually decline from 1,633 D.U. in 1981-1986, to 1,426 d.u in 2001-2006.

d) the preference for multi dwelling units will continue to decline down to a level of 10% of the annual market by 1996.

e) at present, subsidized housing programs support 2,902 D.U. There is a need for an additional 1,770 D.U. to meet the current deficit.

f) the annual demand for subsidized housing will decline from 130 D.U. in 1981-1986, to 100 D.U. in 2001-2206.

g) to meet the desired level of service in nursing homes of 93 beds per 1,000 senior citizens, 55 beds are required annually between 1986-91.

Figure 1: Regina Population 1981 – 2006

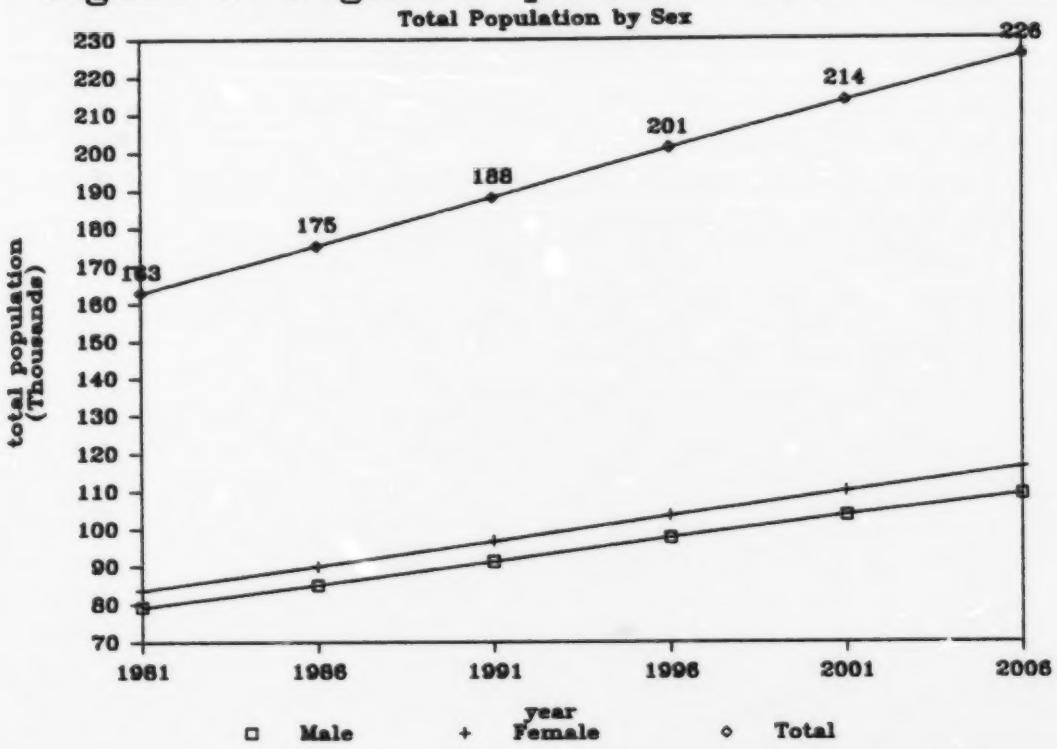


Figure 2: Regina Population 1981 – 2006

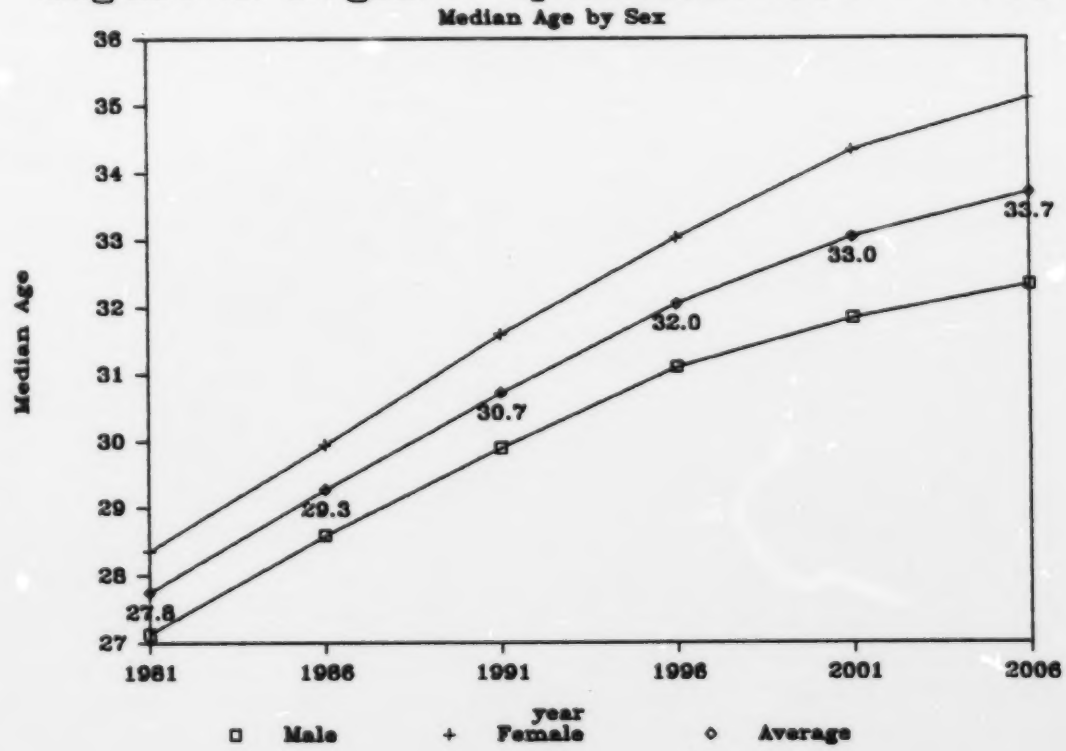


Figure 3: Regina Population 1981 – 2006

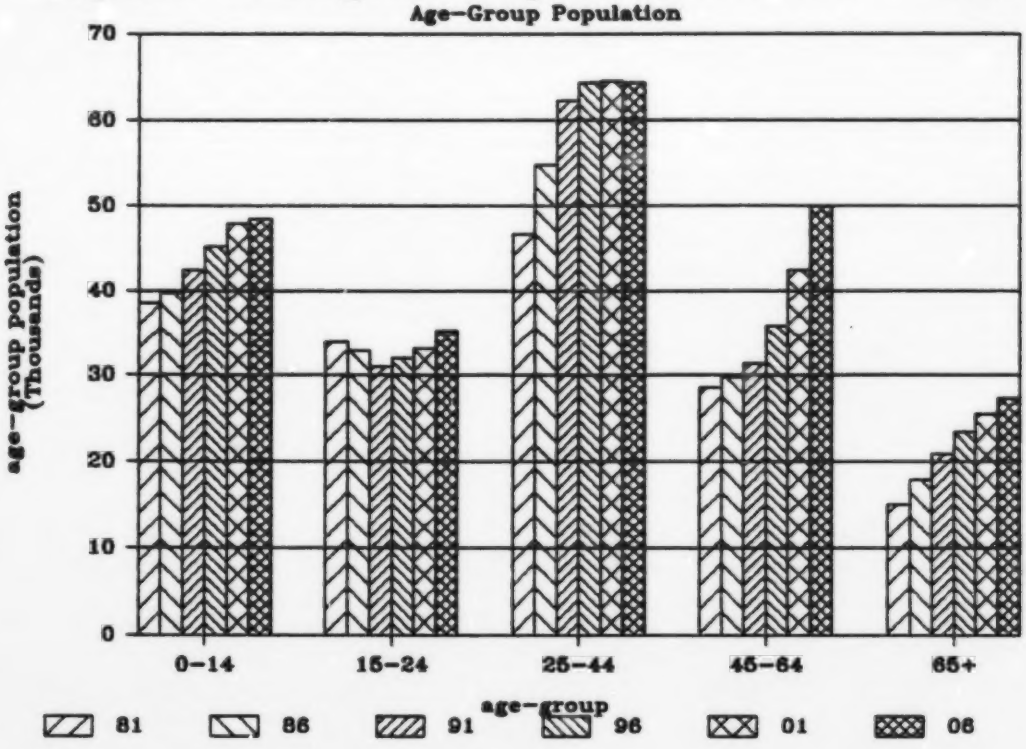


Figure 4: Regina Population 1981 – 2006

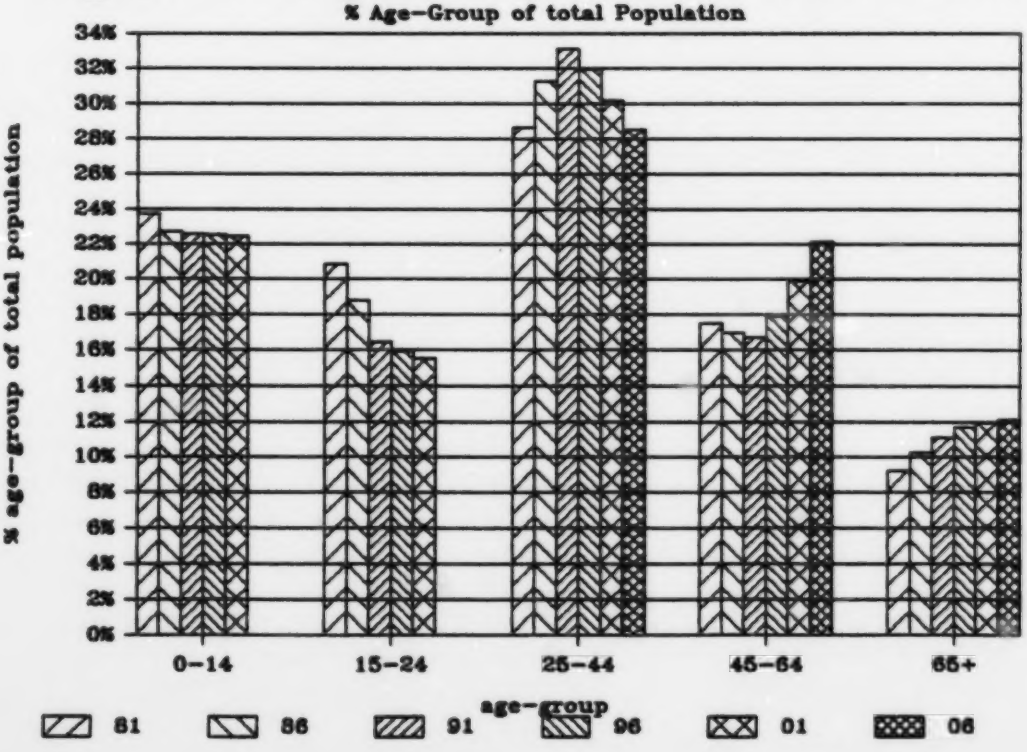


Figure 5: Regina Households 1961–1981

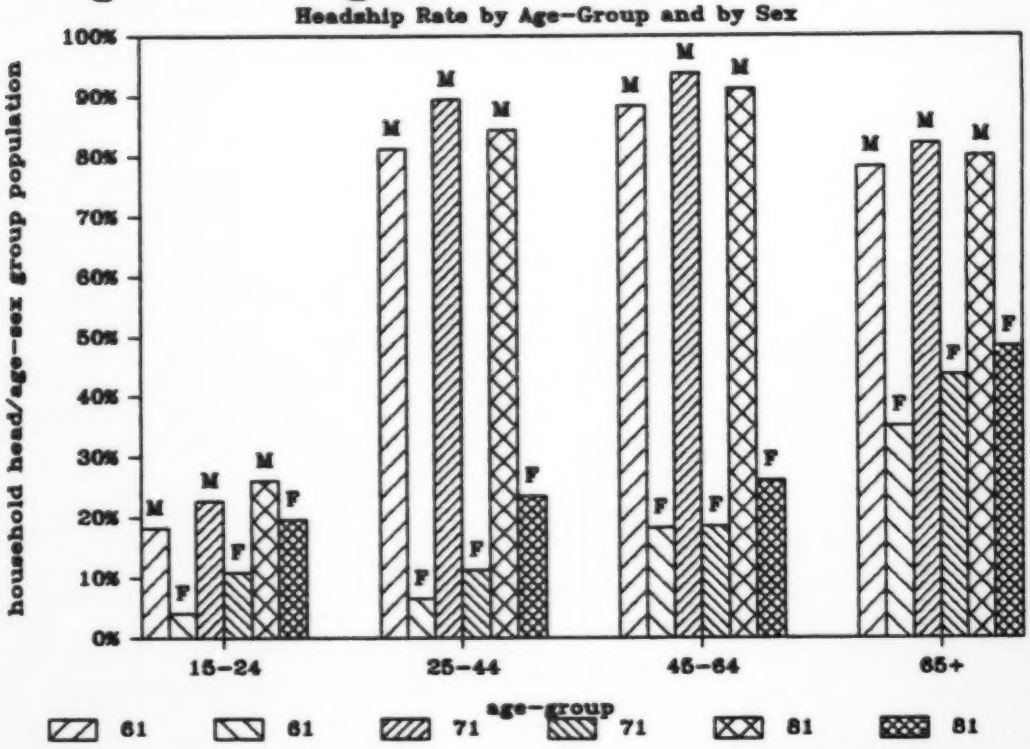


Figure 6: Regina Households 1986–2006

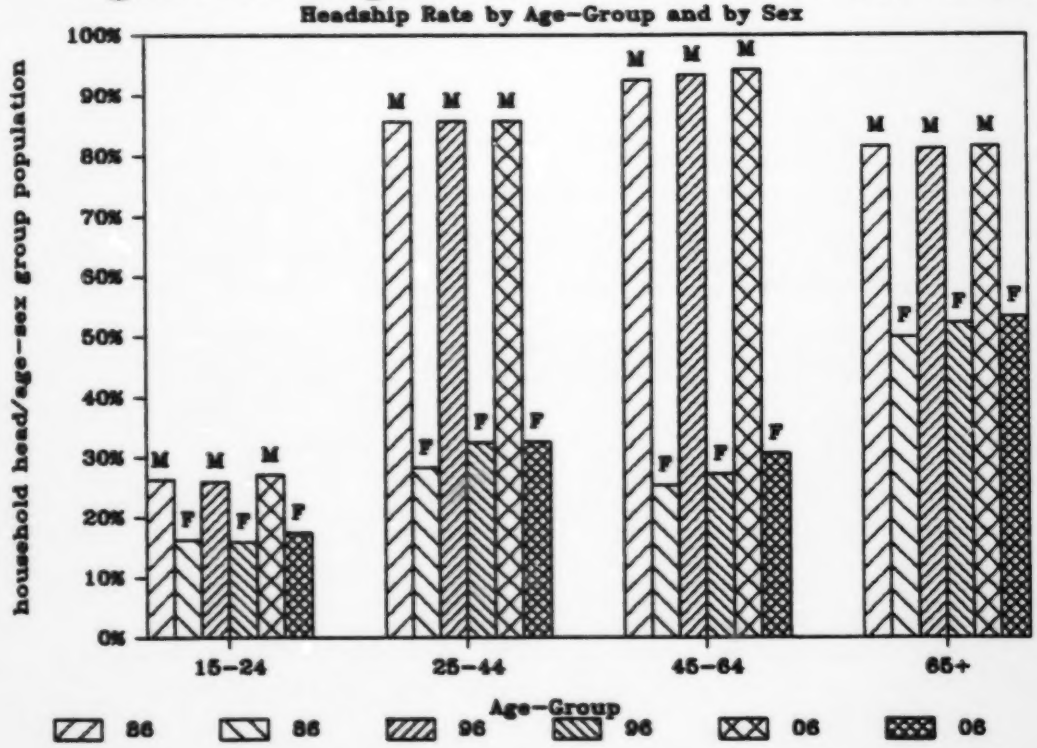


Figure 7: Population & Household Trends

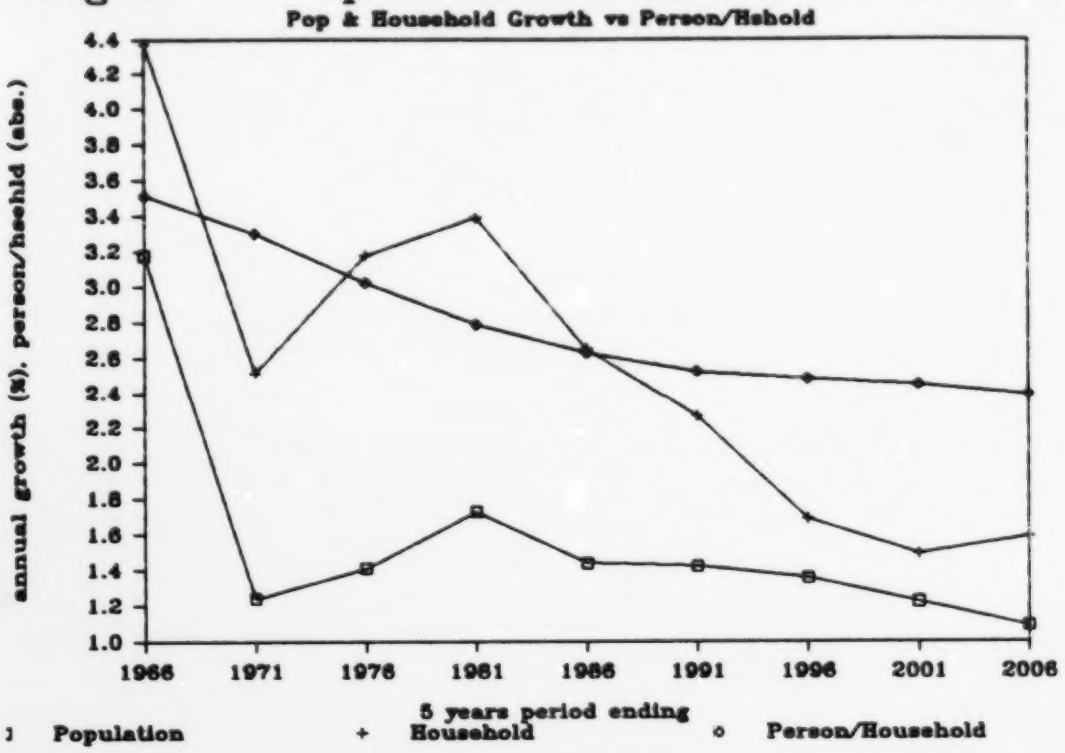


Figure 8: Required Housing 1981–2006

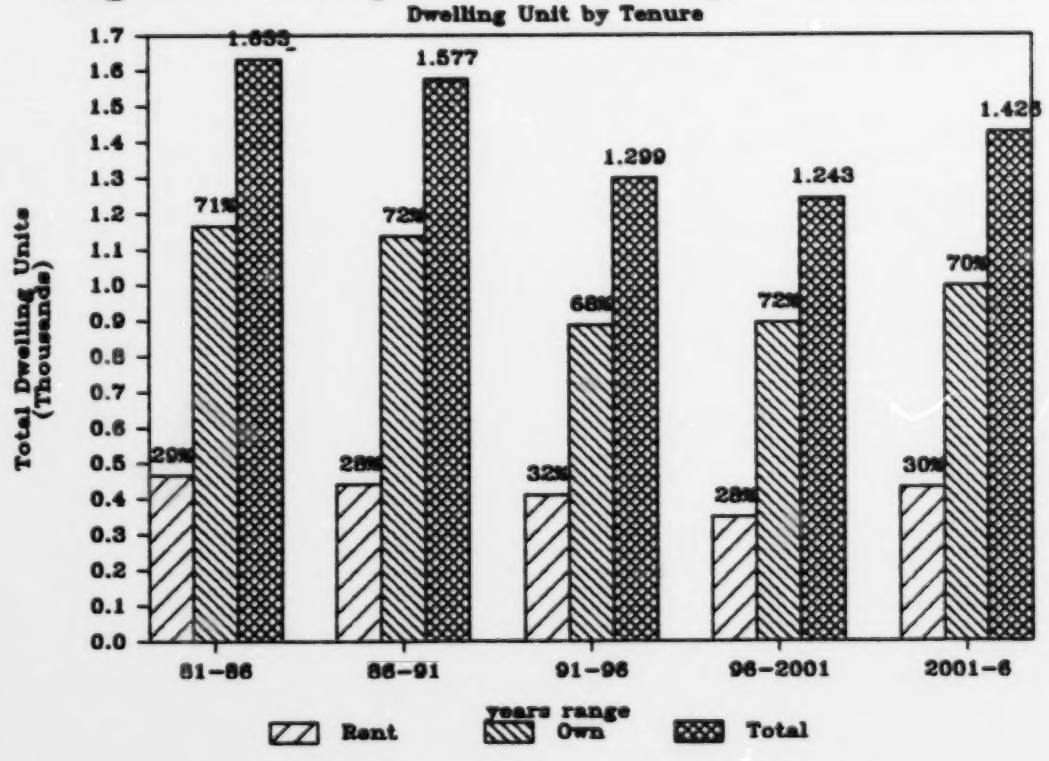


Figure 9: 1981 Regina Housing

Ratio of Dwelling Units by Housing Type

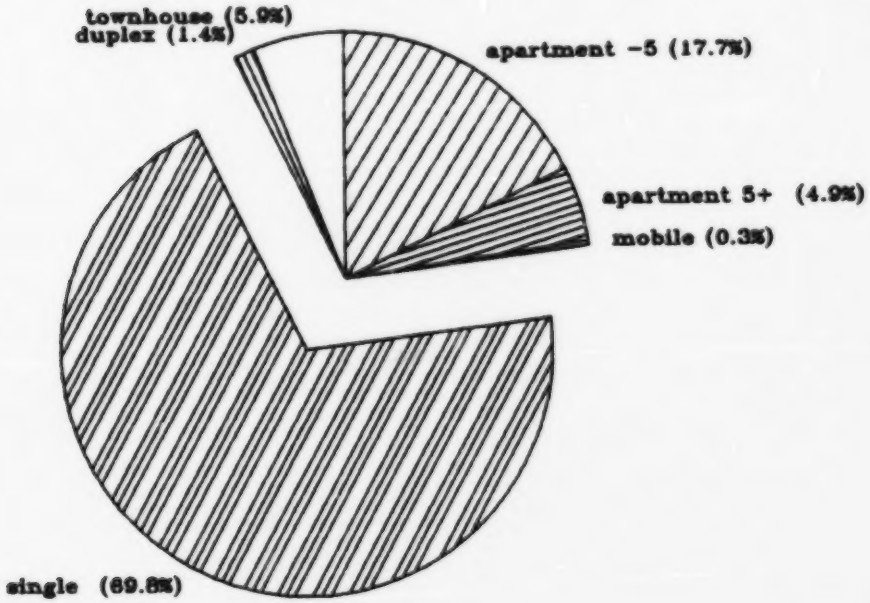


Figure 10: Required Housing 1981–2006

Single and Multi Dwelling Units

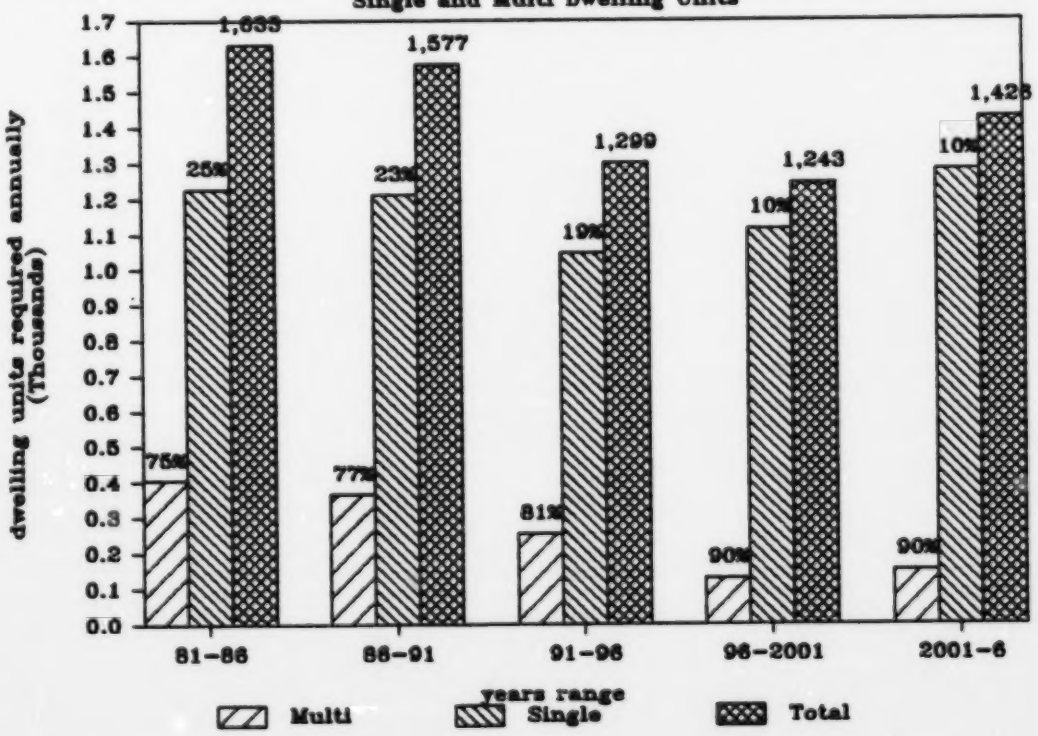


Figure 11: Poverty Households 81–2006

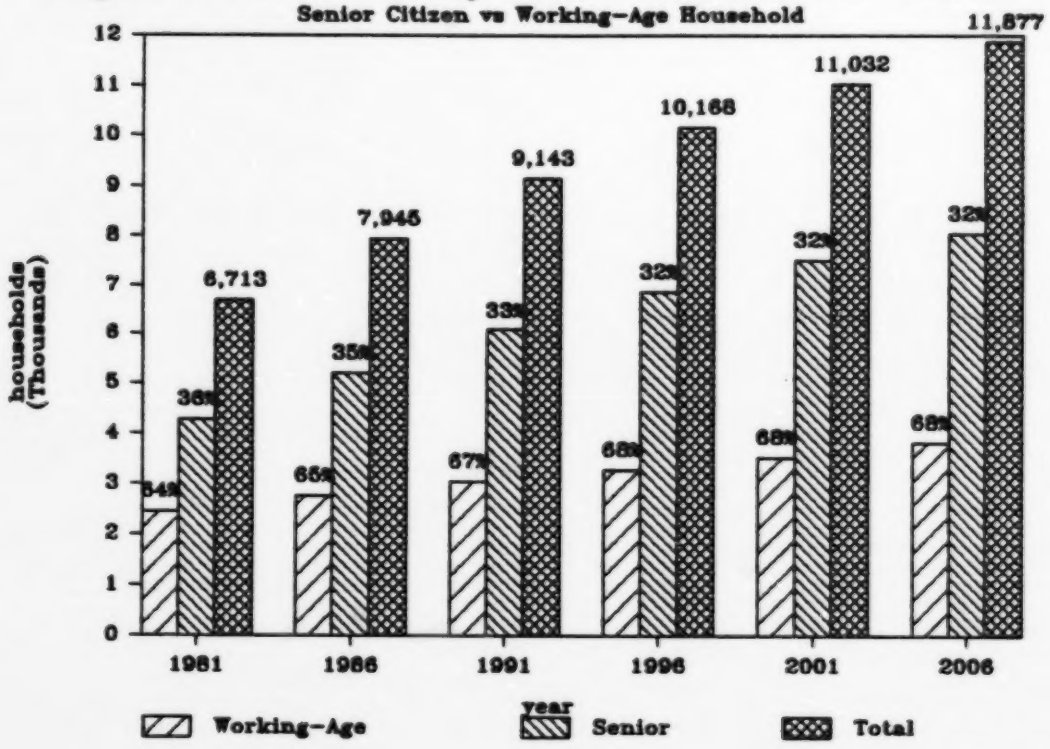


Figure 12: Subsidized Housing 81–2006

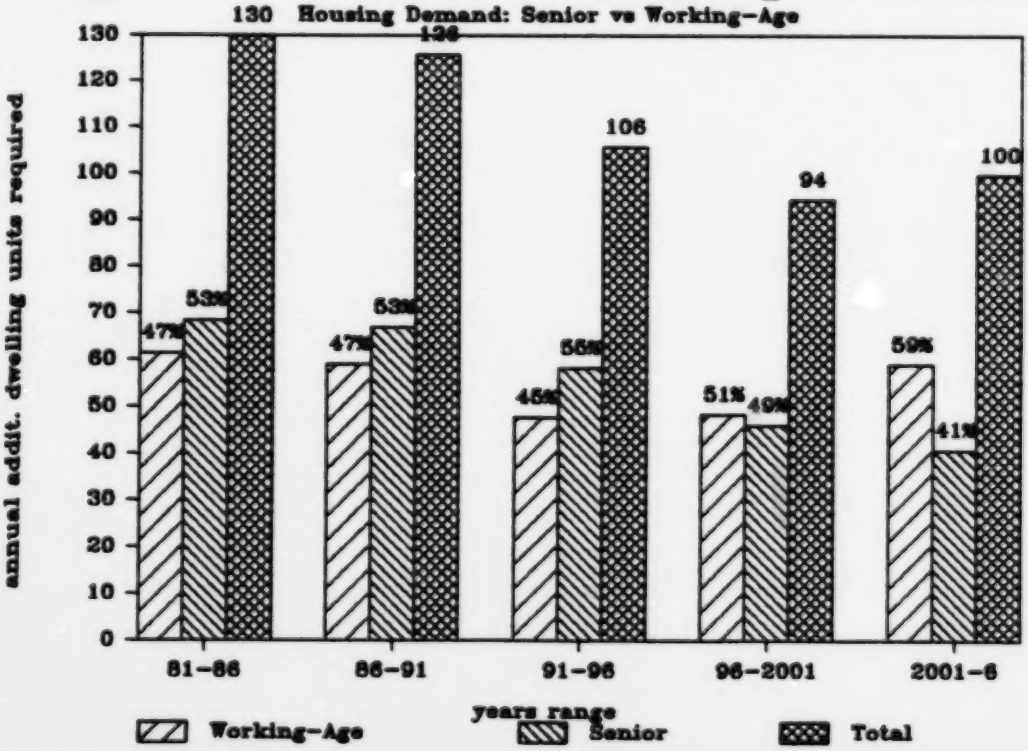
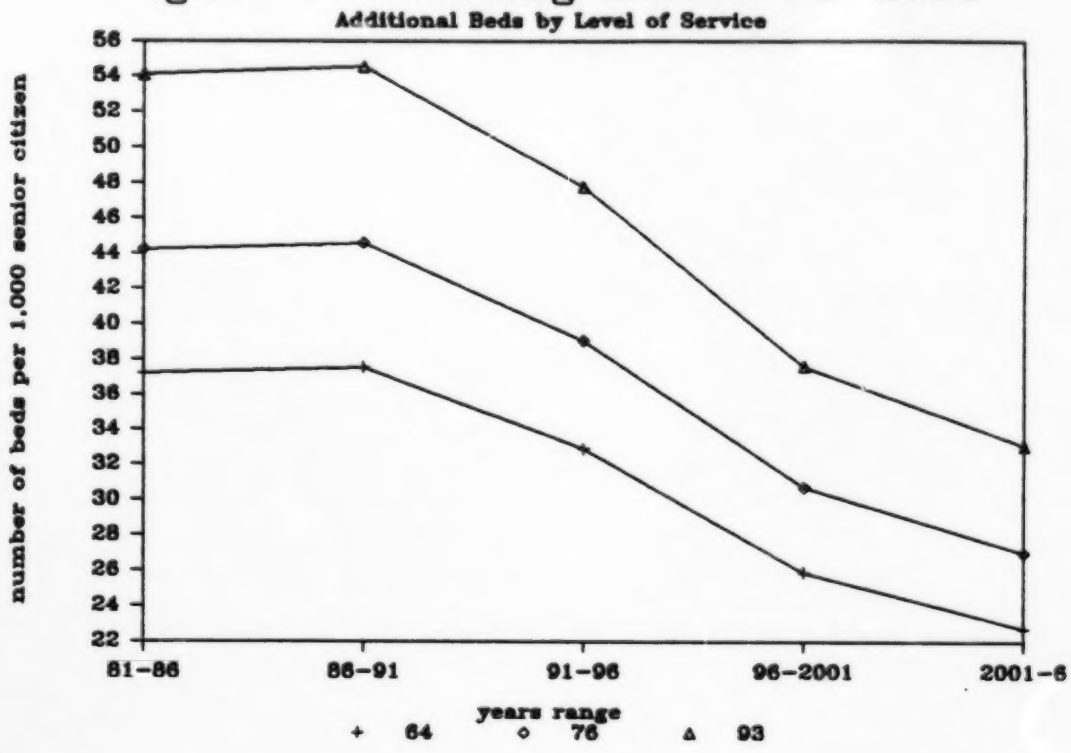


Figure 13: Nursing Homes 81–2006



APPENDIX A: HOUSING FACTORS

Table A1: Household-Head Age-Group by Sex and Household-Head by Tenure: 1981

Age Group	Household Head		Dwelling Unit	
	Male	Female	Rent	Own
15-24	4,314	3,420	5,895	1,805
25-44	19,484	5,539	8,150	16,940
45-64	12,519	3,857	3,450	12,933
65+	4,941	4,304	3,440	5,765

Source: Statistics Canada Census, 1981

Table A2: 1981 Below Poverty Line:

Total Poverty Level: a. General Population = 11.50%
b. Senior Citizens = 46.40%

Source: Statistics Canada Census, 1981
Family Expenditure Survey, 1982

Table A3: 1981 Housing Tenure of Low Income by Household-Head Age-Group:

Age-Group	Dwelling Unit	
	Rent	Own
15-24	100.00%	0.00%
25-44	36.00%	64.00%
45-64	36.00%	64.00%
65+	37.00%	63.00%

Source: Calculation based on Statistics Canada: Household Facilities by Income and Other Charachteristics Survey, 1983

Table A4: Housing Type by Household-Head Age-Group: 1981

Age-Group	Single Detached*		Multi Units**		Total
15-24	2,994	38.9%	4,706	61.1%	7,700
25-44	18,559	74.0%	6,531	26.0%	25,090
45-64	13,429	82.0%	2,954	18.0%	16,383
65+	5,759	62.6%	3,446	37.4%	9,205
Total	40,741	69.8%	17,637	30.2%	58,378

* including mobile homes
** including single attached

Table A5: Housing Type by Household-Head Age-Group: 1971

Age-Group	Single Detached*		Multi Units**		Total
15-24	1,325	28.8%	3,275	71.2%	4,600
25-44	12,540	73.4%	4,550	26.6%	17,090
45-64	10,685	77.9%	3,035	22.1%	13,720
65+	4,400	65.0%	2,365	35.0%	6,765
Total	28,950	68.6%	13,225	31.4%	42,175

* including mobile homes
** including single attached

Table A6: Housing Type by Household-Head Age-Group: 1981

Age-Group	Single Detached	Duplex + Single Attached	Townhouse + other Multiples	Apar'ts 4 Store or Less	Apar'ts 5 Storey or More	Mobiles
24-	7.2%	19.4%	29.2%	33.2%	12.5%	17.9%
25-44	45.6%	54.6%	40.1%	34.1%	22.0%	46.4%
45-64	33.1%	17.2%	17.0%	16.9%	16.0%	28.6%
65+	14.1%	8.8%	13.7%	15.7%	49.5%	7.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

APPENDIX B: HOUSEHOLD PROJECTIONS

Table B1: Cohort Survival Rates: 1971 - 1981

Age-Group	Fertility	Survival		Migration	
	F	M	F	M	F
0-4		0.9853	0.988	-0.0307	-0.0302
5-9		0.9986	0.9989	0.0173	0.017
10-14	0.003	0.9986	0.9992	0.0021	-0.0219
15-19	0.236	0.9915	0.9977	0.0712	0.1757
20-24	0.619	0.9913	0.997	0.202	0.2215
25-29	0.743	0.993	0.9977	-0.0089	-0.0649
30-34	0.406	0.9942	0.9966	-0.0037	-0.0672
35-39	0.083	0.9869	0.995	-0.0343	-0.0228
40-44	0.015	0.9854	0.9922	-0.0133	-0.0063
45-49	0.002	0.9753	0.9915	-0.0124	-0.0044
50-54		0.9679	0.9812	-0.0007	0.0128
55-59		0.9472	0.9774	0.0051	-0.0055
60-64		0.9078	0.9658	-0.0021	-0.01
65-69		0.8858	0.9438	-0.0614	-0.0241
70+		0.679	0.7662	-0.0024	0.0623

Table B2: Population Projections by Age-Group and by Sex: 1981 - 2006

	Age-Group	1981	1986	1991	1996	2001	2006
Male:	0-4	6,910	6,963	7,888	8,332	8,329	8,174
-----	5-9	6,375	6,926	6,980	7,907	8,352	8,348
	10-14	6,430	6,379	6,931	6,985	7,912	8,358
	15-19	7,700	6,878	6,824	7,414	7,471	8,464
	20-24	8,835	9,177	8,197	8,133	8,836	8,904
	25-29	7,955	8,680	9,016	8,054	7,990	8,681
	30-34	6,480	7,870	8,588	8,920	7,968	7,905
	35-39	4,735	6,221	7,556	8,245	8,564	7,650
	40-44	3,950	4,611	6,058	7,358	8,029	8,339
	45-49	3,810	3,844	4,487	5,896	7,161	7,813
	50-54	3,770	3,713	3,746	4,373	5,746	6,979
	55-59	3,350	3,668	3,612	3,645	4,254	5,590
	60-64	2,805	3,166	3,467	3,415	3,445	4,021
	65-69	2,215	2,390	2,698	2,954	2,909	2,935
	70+	3,960	4,640	5,255	5,944	6,636	7,066
Sub Total		79,280	85,126	91,303	97,575	103,602	109,227
Female:	0-4	6,560	6,651	7,534	7,959	7,955	7,807
-------	5-9	6,375	6,591	6,683	7,570	7,997	7,993
	10-14	6,025	6,229	6,440	6,529	7,396	7,813
	15-19	8,050	7,078	7,317	7,565	7,671	8,689
	20-24	9,410	9,810	8,626	8,917	9,220	9,348
	25-29	8,085	8,773	9,146	8,042	8,313	8,596
	30-34	6,650	7,524	8,165	8,512	7,484	7,737
	35-39	4,725	6,476	7,328	7,951	8,290	7,289
	40-44	4,125	4,672	6,403	7,245	7,862	8,196
	45-49	3,860	4,075	4,615	6,325	7,157	7,766
	50-54	3,805	3,876	4,092	4,634	6,352	7,187
	55-59	3,785	3,713	3,782	3,993	4,522	6,198
	60-64	3,355	3,662	3,593	3,660	3,864	4,376
	65-69	2,910	3,162	3,452	3,386	3,450	3,642
	70+	5,995	7,797	9,517	11,207	12,517	13,646
Sub Total		83,715	90,089	96,693	103,495	110,050	116,283
Total		162,995	175,215	187,996	201,070	213,652	225,510

Table B3: Percentage of Age Group of total Population

Age-Group	1981	1986	1991	1996	2001	2006
0-14	23.73%	22.68%	22.58%	22.52%	22.44%	21.50%
15-24	20.86%	18.80%	16.47%	15.93%	15.54%	15.70%
25-44	28.65%	31.29%	33.12%	31.99%	30.19%	28.55%
45-64	17.51%	16.96%	16.70%	17.87%	19.89%	22.14%
65+	9.25%	10.27%	11.13%	11.68%	11.94%	12.10%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table B4: Median Age by Total Population and by Sex

	1981	1986	1991	1996	2001	2006
Male	27.13	28.59	29.90	31.10	31.83	32.33
Female	28.36	29.95	31.59	33.03	34.32	35.10
Overall	27.75	29.28	30.72	32.04	33.04	33.70

Table B5: Population Growth: 1961 - 2006

	Popula-tion	Total Increase	% Annual Increase	Growth Index
1961	112,141			100.0
1966	131,127	18,986	3.18%	116.9
1971	139,469	8,342	1.24%	123.3
1976	149,593	10,124	1.41%	130.6
1981	162,995	13,402	1.73%	139.5
1986	175,215	12,220	1.46%	147.0
1991	187,996	12,781	1.42%	154.3
1996	201,070	13,074	1.35%	161.3
2001	213,652	12,582	1.22%	167.5
2006	225,510	11,858	1.09%	173.1

Table B6: Household Headship Rate by Age-Group and by Sex 1961-81

15-24	Male			Female		
*****	Pop.	Household	Headship Rate	Pop.	Household	Headship Rate
1961	8,474	1,543	18.21%	9,782	394	4.03%
1966	10,900	2,290	21.01%	12,317	1,052	8.54%
1971	13,360	3,035	22.72%	14,295	1,550	10.84%
1976	15,630	4,345	27.80%	16,430	2,295	13.97%
1981	16,535	4,314	26.09%	17,460	3,420	19.59%

25-44	Male			Female		
*****	Pop.	Household	Headship Rate	Pop.	Household	Headship Rate
1961	16,061	13,044	81.22%	16,068	1,050	6.53%
1966	16,980	14,970	88.16%	16,988	1,390	8.18%
1971	17,120	15,315	89.46%	17,205	1,930	11.22%
1976	19,300	16,840	87.25%	19,491	2,765	14.19%
1981	23,120	19,484	84.27%	23,585	5,539	23.49%

45-64	Male			Female		
*****	Pop.	Household	Headship Rate	Pop.	Household	Headship Rate
1961	8,681	7,668	88.33%	9,388	1,707	18.18%
1966	10,278	9,442	91.87%	14,945	2,317	15.50%
1971	11,710	10,965	93.64%	13,330	2,460	18.45%
1976	12,900	11,890	92.17%	14,295	3,285	22.98%
1981	13,735	12,519	91.15%	14,805	3,857	26.05%

65+	Male			Female		
*****	Pop.	Household	Headship Rate	Pop.	Household	Headship Rate
1961	4,151	3,247	78.22%	4,204	1,472	35.01%
1966	4,648	3,741	80.49%	5,260	2,111	40.13%
1971	5,075	4,160	81.97%	6,340	2,760	43.53%
1976	5,535	4,570	82.57%	7,560	3,400	44.97%
1981	6,175	4,941	80.02%	8,905	4,304	48.33%

Table B7: Regression Input: Household Headship Rate by Age-Group and by Sex: 1961-1981

Age-Group	MALE			FEMALE		
15-24	Y *	X1 **	X2 ***	Y *	X1 **	X2 ***
1961	1,543	8,474	394	394	9,782	1,543
1966	2,290	10,900	1,052	1,052	12,317	2,290
1971	3,035	13,360	1,550	1,550	14,295	3,035
1976	4,345	15,630	2,295	2,295	16,430	4,345
1981	4,314	16,535	3,420	3,420	17,460	4,314
25-44	Y	X1	X2	Y	X1	X2
1961	13,044	16,061	1,050	1,050	16,068	13,044
1966	14,970	16,980	1,390	1,390	16,988	14,970
1971	15,315	17,120	1,930	1,930	17,205	15,315
1976	16,840	19,300	2,765	2,765	19,491	16,840
1981	19,484	23,120	5,539	5,539	23,585	19,484
45-64	Y	X1	X2	Y	X1	X2
1961	7,668	8,681	1,707	1,707	9,388	7,668
1966	9,442	10,278	2,317	2,317	14,945	9,442
1971	10,965	11,710	2,460	2,460	13,330	10,965
1976	11,890	12,900	3,285	3,285	14,295	11,890
1981	12,519	13,735	3,857	3,857	14,805	12,519
65+	Y	X1	X2	Y	X1	X2
1961	3,247	4,151	1,472	1,472	4,204	3,247
1966	3,741	4,648	2,111	2,111	5,260	3,741
1971	4,160	5,075	2,760	2,760	6,340	4,160
1976	4,570	5,535	3,400	3,400	7,560	4,570
1981	4,941	6,175	4,304	4,304	8,905	4,941

* Y = total households (dependent variable)
** X1 = total population (independent variable)
*** X2 = opposite sex's total households (independent variable)

Table B8: Multiple Regression Output:

MALE			FEMALE		
Age-Group : 15-24			Age-Group : 15-24		
X1 = age-group population			X1 = age-group population		
			X2 = male 15-24 # household heads		
Constant	-1637.34		Constant	-4434.80	
Std Err of Y Est	215.5737		Std Err of Y Est	425.7372	
R Squared	0.977003		R Squared	0.932887	
No. of Observations	5		No. of Observations	5	
Degrees of Freedom	3		Degrees of Freedom	2	
X Coefficient(s)	0.365101		X Coefficient(s)	0.541874	-0.46525
Std Err of Coef.	0.032339		Std Err of Coef.	0.404796	1.021032
Age-Group : 25-44					
X1 = age-group population			Age-Group : 25-44		
X2 = female 25-44 # household heads			X1 = age-group population		
Constant	-1967.68		Constant	-8538.74	
Std Err of Y Est	778.7217		Std Err of Y Est	239.0792	
R Squared	0.948301		R Squared	0.986859	
No. of Observations	5		No. of Observations	5	
Degrees of Freedom	2		Degrees of Freedom	3	
X Coefficient(s)	1.004704	-0.27370	X Coefficient(s)	0.593363	
Std Err of Coef.	1.126283	1.767740	Std Err of Coef.	0.039531	
Age-Group : 45-64			Age-Group : 45-64		
X1 = age-group population			X1 = age-group population		
			X2 = male 45-64 # household heads		
Constant	-553.887		Constant	-1527.91	
Std Err of Y Est	190.1342		Std Err of Y Est	400.0941	
R Squared	0.992952		R Squared	0.888460	
No. of Observations	5		No. of Observations	5	
Degrees of Freedom	3		Degrees of Freedom	2	
X Coefficient(s)	0.964320		X Coefficient(s)	-0.00507	0.411616
Std Err of Coef.	0.046905		Std Err of Coef.	0.134067	0.157551
Age-Group : 65+					
X1 = age-group population			Age-Group : 65+		
X2 = female 65+ # household heads			X1 = age-group population		
Constant	530.4709		Constant	-1010.04	
Std Err of Y Est	116.1267		Std Err of Y Est	41.12064	
R Squared	0.984584		R Squared	0.998944	
No. of Observations	5		No. of Observations	5	
Degrees of Freedom	2		Degrees of Freedom	3	
X Coefficient(s)	0.615701	0.159220	X Coefficient(s)	0.591225	
Std Err of Coef.	3.584985	2.559372	Std Err of Coef.	0.011096	

Table B9: Household Headship Rate by Age-Group and by Sex:
1986 to 2006

1986 :	Population		Household		Headship Rate	
Age-Group	M	F	M	F	M	F
15-24	16,055	16,888	4,224	2,751	26.31%	16.29%
25-44	27,382	27,445	23,423	7,746	85.54%	28.22%
45-64	14,391	15,326	13,324	3,878	92.58%	25.31%
65+	7,030	10,959	5,730	5,469	81.50%	49.91%
	64,858	70,618	46,701	19,845		

1991 :	Population		Household		Headship Rate	
Age-Group	M	F	M	F	M	F
15-24	15,021	15,943	3,847	2,415	25.61%	15.14%
25-44	31,218	31,042	26,693	9,880	85.50%	31.83%
45-64	15,312	16,082	14,212	4,240	92.81%	26.37%
65+	7,953	12,969	6,487	6,658	81.57%	51.33%
	69,504	76,036	51,239	23,193		

1996 :	Population		Household		Headship Rate	
Age-Group	M	F	M	F	M	F
15-24	15,547	16,482	4,039	2,617	25.98%	15.88%
25-44	32,577	31,750	27,943	10,301	85.78%	32.44%
45-64	17,329	18,612	16,157	5,028	93.24%	27.01%
65+	8,898	14,593	7,222	7,618	81.16%	52.20%
	74,351	81,437	55,361	25,563		

2001 :	Population		Household		Headship Rate	
Age-Group	M	F	M	F	M	F
15-24	16,307	16,891	4,316	2,710	26.47%	16.04%
25-44	32,551	31,949	27,885	10,419	85.66%	32.61%
45-64	20,606	21,895	19,317	6,312	93.74%	28.83%
65+	9,545	15,967	7,750	8,430	81.19%	52.80%
	79,009	86,702	59,268	27,870		

2006 :	Population		Household		Headship Rate	
Age-Group	M	F	M	F	M	F
15-24	17,368	18,037	4,704	3,151	27.08%	17.47%
25-44	32,575	31,818	27,930	10,341	85.74%	32.50%
45-64	24,403	25,527	22,978	7,801	94.16%	30.56%
65+	10,001	17,288	8,155	9,211	81.54%	53.28%
	84,347	92,670	63,767	30,503		

Table B10: Households and Person/Household: 1961-2006

	Total Household	Annual Growth (Ave.)	% Annual Growth (Compound)	Person/ Household
1961	30,125			3.72
1966	37,314	1,438	4.4%	3.51
1971	42,255	988	2.5%	3.30
1976	49,415	1,432	3.2%	3.03
1981	58,378	1,793	3.4%	2.79
1986	66,545	1,633	2.7%	2.63
1991	74,431	1,577	2.3%	2.53
1996	80,924	1,299	1.7%	2.48
2001	87,138	1,243	1.5%	2.45
2006	94,270	1,426	1.6%	2.39

APPENDIX C: HOUSING REQUIREMENTS

Table C1: Regina Households: 1981-2006

Age of Household Head	1981	1986	1991	1996	2001	2006	Total Growth
15-24	7,700	6,975	6,261	6,656	7,026	7,854	154
25-44	25,090	31,169	36,573	38,244	38,303	38,271	13,181
45-64	16,383	17,202	18,452	21,185	25,629	30,779	14,396
65+	9,205	11,199	13,145	14,840	16,180	17,366	8,161
Total	58,378	66,545	74,431	80,924	87,138	94,270	35,892

Table C2: Regina Housing Requirement by Income, by Tenure and by Household-Head Age-Group: 1981-2006

		Low Income		Above Low Income		General Pop.	
Year	Age-Group	Rent	Own	Rent	Own	Rent	Own
1981	15-24	382	0	5,513	1,805	5,895	1,805
	25-44	449	798	7,701	16,142	8,150	16,940
	45-64	293	521	3,157	12,412	3,450	12,933
	65+	1,580	2,691	1,860	3,074	3,440	5,765
1986	15-24	346	0	4,994	1,635	5,340	1,635
	25-44	557	991	9,567	20,054	10,125	21,044
	45-64	308	547	3,315	13,033	3,622	13,580
	65+	1,923	3,274	2,263	3,740	4,185	7,014
1991	15-24	311	0	4,483	1,468	4,794	1,468
	25-44	654	1,163	11,226	23,531	11,880	24,693
	45-64	330	587	3,556	13,980	3,886	14,566
	65+	2,257	3,842	2,656	4,390	4,912	8,232
1996	15-24	331	0	4,765	1,560	5,096	1,560
	25-44	684	1,216	11,739	24,605	12,423	25,821
	45-64	379	673	4,082	16,050	4,461	16,724
	65+	2,548	4,338	2,998	4,956	5,546	9,294
2001	15-24	349	0	5,030	1,647	5,379	1,647
	25-44	685	1,218	11,757	24,644	12,442	25,861
	45-64	458	815	4,939	19,417	5,397	20,232
	65+	2,778	4,730	3,269	5,404	6,046	10,133
2006	15-24	390	0	5,623	1,841	6,013	1,841
	25-44	684	1,217	11,747	24,623	12,432	25,839
	45-64	550	978	5,931	23,319	6,482	24,298
	65+	2,981	5,076	3,508	5,800	6,490	10,876

Table C3: Regina Annual Housing Requirement by Tenure: 1981-2006

Tenure	1981 Overall Required	1981 to 1986	1986 to 1991	1991 to 1996	1996 to 2001	2001 to 2006	25 Years Total
Rent	20,935	467	440	411	348	430	10,481
%	35.9%	28.6%	27.9%	31.6%	28.0%	30.2%	29.2%
Own	37,443	1,166	1,137	888	895	996	25,411
%	64.1%	71.4%	72.1%	68.4%	72.0%	69.8%	70.8%
Total	58,378	1,633	1,577	1,299	1,243	1,426	35,892

Table C4: Regina Household Poverty by Age-Group: 1981-2006

	1981	1986	1991	1996	2001	2006
Poverty-Rates						
Senior Citizens	46.40%	46.40%	46.40%	46.40%	46.40%	46.40%
Working Pop.	4.97%	4.97%	4.97%	4.97%	4.97%	4.97%
Total	11.50%	11.94%	12.28%	12.56%	12.66%	12.60%
Poverty Household						
Senior Citizens	4,271	5,196	6,099	6,886	7,507	8,058
Working Pop.	2,442	2,749	3,044	3,282	3,524	3,820
Total	6,713	7,945	9,143	10,168	11,032	11,877

Table C5: Net Addition of Dwelling Units by Age Group and Type: 1971 to 1981

Age of Household Head	Single Dwelling* Units	%	Multi Dwelling** Units	%	Total
15-24	1,669	53.8%	1,431	46.2%	3,100
25-44	6,019	75.2%	1,981	24.8%	8,000
45-64	2,744	103.0%	-81	-3.0%	2,663
65+	1,359	55.7%	1,081	44.3%	2,440
Total	11,791	72.8%	4,412	27.2%	16,203

* including mobile homes
** including single attached

Table C6: Annual Housing Requirement by Type of Housing:
1981 to 2006

Age of Household Head	Increase Household Head	Units Required --- Single * --		--- Multi ** --	
1981 - 1986:					
15-24	-145	-78	53.8%	-67	46.2%
25-44	1,216	915	75.2%	301	24.8%
45-64	164	169	103.0%	-5	-3.0%
65+	399	222	55.7%	177	44.3%
Total	1,633	1,228	75.2%	406	24.8%
1986 - 1991:					
15-24	-143	-77	53.8%	-66	46.2%
25-44	1081	813	75.2%	268	24.8%
45-64	250	258	103.0%	-8	-3.0%
65+	389	217	55.7%	172	44.3%
Total	1,577	1,211	76.8%	367	23.2%
1991 - 1996:					
15-24	79	43	53.8%	36	46.2%
25-44	334	251	75.2%	83	24.8%
45-64	547	563	103.0%	-17	-3.0%
65+	339	189	55.7%	150	44.3%
Total	1,299	1,046	80.5%	253	19.5%
1996 - 2001:					
15-24	74	40	53.8%	34	46.2%
25-44	12	9	75.2%	3	24.8%
45-64	889	916	103.0%	-27	-3.0%
65+	268	149	55.7%	119	44.3%
Total	1,243	1,114	89.6%	129	10.4%
2001 - 2006:					
15-24	166	89	53.8%	76	46.2%
25-44	-6	-5	75.2%	-2	24.8%
45-64	1,030	1061	103.0%	-31	-3.0%
65+	237	132	55.7%	105	44.3%
Total	1,426	1,278	89.6%	149	10.4%

* including mobile homes
** including single attached

Table C7: Annual Additional Demand for Subsidized Housing for Working Population (15-64 a.g.) and for Senior Citizens: 1981-2006

	1981 Overall Required	1981 to 1986	1986 to 1991	1991 to 1996	1996 to 2001	2001 to 2006	25 Years Total
Working-Age Dwelling Units:							
Rent	1,124	17	17	20	20	27	501
Own	1,318	44	42	28	29	33	877
Total	2,442	61	59	48	48	59	1,377
Senior Citizens Dwelling Units:							
Rent	1,580	68	67	58	46	41	1,401
Own	2,691	117	114	99	78	69	2,386
Total	4,271	185	181	157	124	110	3,787
Overall Household Dwelling Units:							
Rent	2,704	86	84	78	66	67	1,902
Own	4,009	160	156	127	107	102	3,262
Total	6,713	246	240	205	173	169	5,164
Overall Required Subsidized Housing: *							
Level 1	2,704	86	84	78	66	67	1,902
Level 2	4,023	130	126	106	94	100	2,778
Level 3	6,713	246	240	205	173	169	5,164

1986 Qualified: *	1986 Public Subsidized Units:	1986 Deficit:
Level 1	3,134	2,902	232
Level 2	4,672	2,902	1,770
Level 3	7,945	2,902	5,043

* household requiring subsidized housing include:
  Level 1 = working-age + senior households who rent their housing.
  Level 2 = includes Level I + working-age households who own homes excluding senior citizens who own homes.
  Level 3 = working-age and senior households who rent or own homes

Table C8: Annual Additional Beds Required in Nursing Homes: 1981 to 2006

	1981 to 1986	1986 to 1991	1991 to 1996	1996 to 2001	2001 to 2006	25 Years Total
Annual Increase of Senior Citizen Pop	582	587	514	404	355	12,209
Annual Required Beds/ 1,000 seniors:						
a. 64 *	37	38	33	26	23	781
b. 76 **	44	45	39	31	27	1,221
c. 93 ***	54	55	48	38	33	1,831
Accumulated total based on 1,367 Beds in 1986:						
a. 64 *	1,307	1,495	1,659	1,788	1,902	1,902
b. 76 **	1,367	1,590	1,785	1,939	2,074	2,074
c. 93 ***	1,452	1,725	1,964	2,152	2,317	2,317

* the provincial target level
** current level in Regina, based on 1,367 beds provided in 1986
*** level to support in 1986 the 305 priority applicants.